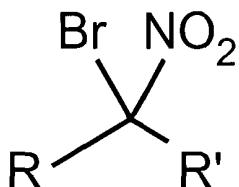


I claim:

1. A molecule containing a bromo-nitro group having the



formula:

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where R and R' are the same or different and are independently chosen from the group containing polysiloxane, linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine, alkylamide, alkylquat, alkanol, ether, polyether, arylalkyl, carboxylic acid, ester, polyester and ketone.

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2. The Molecule of claim 1 wherein the bromo-nitro group has an occurrence rate of greater than 1.

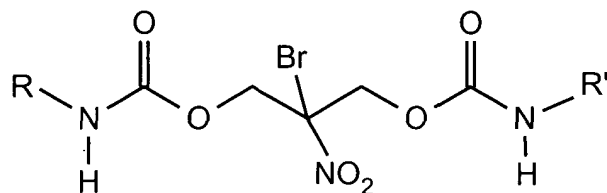
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3. A metal working fluid base comprising the molecule according to claim 1.

4. A surfactant comprising a molecule according to claim 1.

5. A foaming or anti-foaming agent comprising a molecule
5 according to claim 1.

6. A molecule comprising at least one bromo-nitro group
covalently bonded, said molecule having the formula:



where R and R' are the same or different and are

15 independently chosen from the group containing
polysiloxane, linear or branched, saturated or unsaturated,
alkyl, alkenyl, alkylamine, alkylamide, alkylquat, alkanol,
ether, polyether, arylalkyl, carboxylic acid, ester,
polyester, and ketone.

7. A metal working fluid base comprising a molecule according to claim 6.

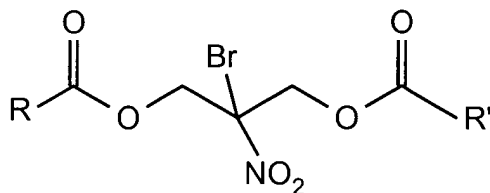
5 8. A surfactant comprising a molecule according to claim 6.

9. A foaming or anti-foaming agent comprising a molecule according to claim 6.

10 10. The molecule of claim 6 wherein the occurrence rate of the bromine and nitro group is greater than 1.

11. An ester comprising at least one bromo-nitro group of the formula:

15



where R and R' are the same or different and are

independently chosen from the group containing

20 polysiloxane, linear or branched, saturated or unsaturated,

alkyl, alkenyl, alkylamine, alkylamide, alkylquat, alkanol, ether, polyether, arylalkyl, carboxylic acid, ester, polyester, and ketone.

5 12. A metal working fluid base comprising a molecule according to claim 11.

13. A surfactant comprising a molecule according to claim 11.

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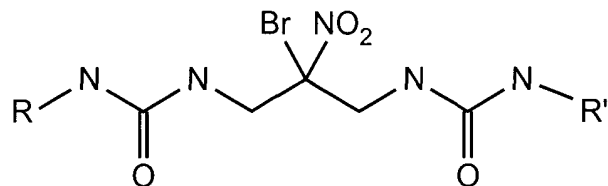
14. A foaming or anti-foaming agent comprising a molecule according to claim 11.

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15. The molecule of claim 11 wherein the occurrence rate of the bromine and nitro group is greater than 1.

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16. A molecule comprising at least one bromo-nitro group covalently bonded of the formula:



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where R and R' are the same or different and are independently chosen from the group containing polysiloxane, linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine, alkylamide, alkylquat, alkanol, ether, polyether, arylalkyl, carboxylic acid, ester, polyester, and ketone.

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17. A metal working fluid comprising a molecule according to claim 16.

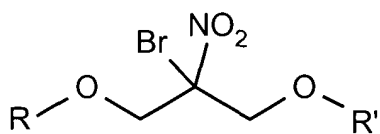
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18. A surfactant comprising a molecule according to claim 16.

19. A foaming or anti-foaming agent comprising a molecule according to claim 16.

20. The Molecule of claim 16 wherein the bromo-nitro group has an occurrence rate of greater than 1.

21. A molecule comprising at least one bromo-nitro group covalently bonded of the formula:



where R and R' are the same or different and are independently chosen from the group containing polysiloxane, linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine, alkylamide, alkylquat, alkanol, ether, polyether, arylalkyl, carboxylic acid, ester, polyester, and ketone.

22. The molecule of claim 21 wherein R and/or R' is $-(\text{CH}_2\text{CH}_2\text{O})_x-(\text{CH}_2\text{CHCH}_3\text{O})_y-(\text{CH}_2\text{CH}(\text{CH}_2\text{CH}_3)_z\text{H}$, where x, y, and z are integers from 0 to 30.

23. A metal working fluid comprising a molecule according to claim 21.

24. A surfactant comprising a molecule according to claim 21.

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25. A foaming or anti-foaming agent comprising a molecule according to claim 21.

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26. The Molecule of claim 21 wherein the bromo-nitro group has an occurrence rate of greater than 1.

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27. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same or different carbon atoms wherein said molecule is a reaction product of an isocyanate functional molecule with an alcohol functional molecule, the alcohol functional molecule or isocyanate functional molecule containing the bromine atom and the nitro group.

20

28. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same or different carbon atoms wherein said molecule is a reaction product of an

isocyanate functional molecule with an amine functional molecule, the amine functional molecule or isocyanate functional molecule containing the bromine atom and the nitro group.

5 29. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same or different carbon atoms wherein said molecule is a reaction product of an epoxide and BNPD or a bromo-nitro functional alcohol.

10 30. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same or different carbon atoms wherein said molecule is a reaction product of a carboxylic acid functional molecule with an alcohol functional molecule, said alcohol functional molecule or carboxylic acid
15 functional molecule containing the bromine atom and the nitro group.

31. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same carbon atom
20 wherein said molecule is a reaction product of an isocyanate functional molecule with an alcohol functional molecule, the alcohol functional molecule or isocyanate functional molecule

containing the bromine atom and the nitro group.

32. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same carbon atom

5 wherein said molecule is a reaction product of an isocyanate functional molecule with an amine functional molecule, the amine functional molecule or isocyanate functional molecule containing the bromine atom and the nitro group.

10 33. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same carbon atom

wherein said molecule is a reaction product of an epoxide and BNPD or a bromo-nitro functional alcohol.

15 34. A molecule comprising at least one bromine atom and at least one nitro group covalently bonded to the same carbon atom wherein

said molecule is a reaction product of a carboxylic acid functional molecule with an alcohol functional molecule, said alcohol functional molecule or carboxylic acid functional

20 molecule.

35. A molecule comprising the reaction product of an alcohol and

a carboxylic acid, said alcohol containing at least one substituted bromine atom and at least one substituted nitro group.

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